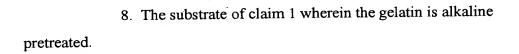
WHAT IS CLAIMED IS:

- 1. A gelatin-based substrate for fabricating protein arrays, the substrate comprising: gelatin and a trifunctional compound A-L-B; wherein A is a functional group capable of interacting with the gelatin; L is a linking group capable of interacting with A and with B; and B is a functional group capable of interacting with a protein capture agent, wherein A may be the same or different from B.
- 2. The gelatin-based substrate of claim 1 wherein the interaction between the gelatin and A is a physical binding or a chemical reaction.
- 3. The gelatin-based substrate of claim 1 wherein the interaction between the protein capture agent and B is a physical binding or a chemical reaction.

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- 4. The gelatin-based substrate of claim 1 wherein either A or B, or both, is aldehyde, epoxy, hydrazide, vinyl sulfone, succinimidyl ester, carbodiimide, maleimide, dithio, iodoacetyl, isocyanate, isothiocyanate, or aziridine.
- 5. The gelatin-based substrate of claim 1 wherein B is an affinity tag capable of interacting non-covalently with a protein capture agent that is to be immobilized onto the substrate.
- 6. The gelatin-based substrate of claim 1 wherein B is streptavidin, biotin, glutathione-S-transferase, glutathione, or histidine tags.
- 7. The gelatin-based substrate of claim 1 wherein L is a diradical of such a length that the shortest through-bond path between the ends that connect A to B is not greater than 10 atoms.



- 9. The substrate of claim 1 wherein the gelatin is pig gelatin or fish gelatin.
- 10. The substrate of claim 1 wherein the gelatin coverage is 0.2 to 100 grams per square meter.
- 11. The substrate of claim 1 wherein the gelatin coverage is 10 to 50 grams.
- 12. A method of making a gelatin-based substrate for fabricating protein arrays comprising the steps of:
 --providing a support;
 - --coating on the support a composition containing gelatin;
- --affixing to a surface of the gelatin a trifunctional compound A-L-B; wherein A is a functional group capable of interacting with the gelatin; L is a linking group capable if interacting with A and with B; and B is a functional group capable of interacting with a protein capture agent; wherein A may be the same or different from B.
- 13. The method of claim 12 wherein the trifunctional compound ALB is affixed while coating the gelatin on the substrate.
- 14. The method of claim 12 wherein the trifunctional compound ALB is affixed after coating the gelatin on the substrate.
- 15. The method of claim 12 wherein the protein capture agent is antibody, protein scaffold, peptide, nucleic acid ligand, or a molecular imprinting polymer.

- 16. A method of making a substrate having a protein capture agent affixed onto a surface comprising the steps of:
 - -- providing a substrate comprising gelatin;
 - -- affixing to a surface of the gelatin a trifunctional compound A-L-

B; wherein A is a functional group capable of interacting with the gelatin; L is a linking group capable if interacting with A and with B; and B is a functional group capable of interacting with a protein capture agent; and

--bringing said surface of the gelatin in contact with a protein.

- 17. A substrate comprising gelatin and a plurality of protein capture agents attached to the gelatin by means of a trifunctional compound A-L-B; wherein A is a functional group capable of interacting with the gelatin; L is a linking group capable if interacting with A and with B; and B is a functional group attached to the a protein capture agent.
- 18. The substrate of claim 17 wherein the protein capture agent is an antibody, protein scaffold, peptide, nucleic acid ligand, or a molecular imprinting polymer.